

ABSTRACT OF THE DISCLOSURE

An immunoassay method comprising bringing an immobilized phase comprising, at different positions on a water-absorbable base material, at least two first immunity substances capable of specifically binding with at least two kinds of assay target substances selected from the group consisting of verotoxin-producing *Escherichia coli*, verotoxin and human hemoglobin contained in a test sample, into contact with a test sample and a liquid containing labeled immunity substances each comprising a second immunity substance that is labeled with colored particles and capable of binding with said assay target substance, thereby to form an assay target substance-labeled immunity substance complex and to bind said complex with respective first immunity substances at the immobilized phase. The immunoassay method, the immunoassay device and the immunoassay kit of the present invention enable easy and simultaneous analysis of O157 (VTEC), VT and Hb in a test sample, by adsorption of the assay target substances on an immobilized phase and evaluation of the developed color.